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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PATEL, DHAIRYA A	

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,056	CRUICKSHANK ET AL.	
	Examiner	Art Unit	
	Dhairya A Patel	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Application # 09/995,056 was filed on 11/26/2001.

2. This action is response to the restriction requirement. Claims 1-32 were originally filed. Claims 33-66 were later in the restriction requirement as a preliminary amendment. Therefore claims 1-66 are subject to examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3,15-21, 33-34,47-53,65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabelsky et al. U.S. Patent # 6,678,250 (hereinafter Grabelsky) in view of Kekic et al. U.S. Patent # 5,999,179 (hereinafter Kekic)

As per claim 1, Grabelsky teaches a computer program product comprising computer-executable instructions for causing a computer to:

-obtain performance data related to performance of a broadband network (column 4 lines 14-18)(column 8 lines 37-47); and

The reference teaches the plurality of gateways are designated as processing and network cluster monitoring sites to collect network performance data (obtain performance data) and provide a network-wide view of conditions on the network.

-a first level with first data indicative of network operation (column 8 lines 60-67) and a second level with second data indicative of a plurality of issues comprising the first level of network performance (column 14 lines 50-58);

-wherein the second level includes multiple issues that contain a third level with third data indicative of network issues comprising at least some of the secondary level issues (column 14 lines 60-68).

Grabelsky is silent on teaching provide a hierarchical display of network performance. Kekic teaches provide a hierarchical display of network performance (Fig. 6 A element 305)(Fig. 9A)(Fig. 35A)(Fig. 37A-M)

The reference teaches the hierarchical display of the network performance (polling, WinNT_performance, Netscape server, HP4SI, SNMP manager etc.).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Kekic's invention in Grabelsky's invention to come up with putting a hierarchical display of the network performance of first level with first data, second level with second data and third level with third data to show the performance data in hierarchy of the levels. The motivation for doing so would have been it would have been more user friendly because it is easier to see a performance of first level and then in hierarchy seeing the second level performance and then third level performance rather than showing them in table or on one page which is not user friendly.

As per claim 2, Grabelsky and Kekic teaches the computer program product of claim 1 but Grabelsky further teaches wherein the first data are indicative of overall performance of one of the network, and a selected portion of the network (column 15

lines 8-10)(column 16 lines 1-8) or (claim 4 and claim 5)

The reference teaches the network performance data (first data) of overall first network within its particular first group (selected portion of the network)

As per claim 3, Grabelsky and Kekic teaches the computer program product of claim 2 but Grabelsky further wherein the first data are indicative of overall performance of the network (column 15 lines 8-10)(column 16 lines 1-8) and the issues at the second level include at least one of connectivity and traffic (column 12 lines 4-13).

The reference teaches phase 1 (second level) processing the network performance data such as packet delivery, packet loss, jitter etc. (connectivity and traffic).

As per claim 15, Grabelsky teaches the computer program product of claim 1 but fails to teach wherein the hierarchical display is independent of an amount of network elements contributing to the indicia of network performance. Kekic teaches the hierarchical display is independent of an amount of network elements contributing to the indicia of network performance (Fig. 6 A element 305)(Fig. 9A)(Fig. 35A)(Fig. 37A-M). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Kekic's invention in Grabelsky's invention to come up with putting a hierarchical display independent of an amount of network elements contributing to indicia of network performance. One would have been motivated to do so to just view the network elements just incase if someone wants to view the network performance of the network element, they can view it and can also analyze the network performance.

As per claim 16, Grabelsky and Kekic teaches the computer program product of claim 15 but Grabelsky further teaches wherein the second data are indicative of network issues perceived to affect network performance more than network issues (column 8 lines 24-31)(column 14 lines 50-58)but fails to teach second data absent from the display. Kekic teaches second data absent from the display (Fig. 6 A element 305)(Fig. 9A)(Fig. 35A)(Fig. 37A-M). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Kekic's invention in Grabelsky's invention to come up with having second data indicative of network issues, which are absent from the display. The motivation for not showing the second data on the display is because to show the network issues on the display, which are more important than the second data .

As per claim 17, Grabelsky and Kekic teaches the computer program product of claim 1, but Grabelsky fails to teach wherein the displayed data associated with levels provide indicia of absolute performance of portions of the network associated with the respective levels. Kekic teaches the displayed data associated with levels provide indicia of absolute performance of portions of the network associated with the respective levels. (Fig. 6A-C) (Fig. 9A)

The reference teaches the request status on one of managed element level (Fig. 6A element 632,305). The figure 9B teaches the absolute performance of the network (Fig. 6B element 603) and also the status of the elements in the element manager's list (Fig. 9A).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Kekic's invention in Grabelsky's invention to come up with displaying data associated with the levels to provide indicia of absolute performance. The motivation for doing so would have been to check on the status of the network elements in the portion of the network.

As per claim 18, Grabelsky and Kekic teaches the computer program product of claim 1, but Grabelsky fails to teach wherein the displayed data associated with levels provide indicia of relative performance of portions of the network associated with the respective levels. Kekic teaches the displayed data associated with levels provide indicia of relative performance of portions of the network associated with the respective levels. (Fig. 6A-C) (Fig. 9A)

The reference teaches the request status on one of managed element level (Fig. 6A element 632,305). The figure 6A (element 631,632) and figure 6B (element 634,633) teaches the relative performance of the network (Fig. 6B element 603) and also the status of the elements in the element manager's list (Fig. 9A).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Kekic's invention in Grabelsky's invention to come up with displaying data associated with the levels to provide indicia of relative performance. The motivation for doing so would have been to check on the status of the network elements in the portion of the network.

As per claim 19, Grabelsky and Kekic teaches the computer program product of claim 18 wherein the displayed data associated with levels provide indicia of absolute

performance of portions of the network associated with the respective levels (Fig. 6A-C) (Fig. 9A)

The reference teaches the request status on one of managed element level (Fig. 6A element 632,305). The figure 6A (element 631,632) and figure 6B (element 634,633) teaches the absolute performance of the network (Fig. 6B element 635) and also the status of the elements in the element manager's list (Fig. 9A).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Kekic's invention in Grabelsky's invention to come up with displaying data associated with the levels to provide indicia of absolute performance. The motivation for doing so would have been to check on the status of the network elements in the portion of the network.

As per claim 20, Grabelsky and Kekic teaches the computer program product of claim 19, but fails to teach comprising instructions for providing a display of the data associated with levels over time. Kekic further teaches comprising instructions for providing a display of the data associated with levels over time (Fig. 35A) (Fig. 35B) It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Kekic's teaching in Grabelsky's teaching to come up with displaying of the data associated with levels of time. The motivation for doing so would have been so that to see how the network behaves over time so that one could use this information on how in future the network might work or behave.

As per claim 21, it teaches same limitations as claim 20, therefore rejected under same basis.

As per claims 33-34,48-53 teaches same limitations as claims 1-3,16-21 respectively, therefore rejected under same basis.

As per claim 65, it teaches same limitations as claim 1 respectively, therefore rejected under same basis.

4. Claims 9-14,22, 41-46,54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabelsky et al. U.S. Patent # 6,678,250 (hereinafter Grabelsky) in view of Kekic et al. U.S. Patent # 5,999,179 (hereinafter Kekic) further in view of Feinberg et al. U.S. Patent # 6,798,745 (hereinafter Feinberg)

As per claim 9, Grabelsky and Kekic teaches the computer program product of claim 1 but fails to teach wherein the collected data are metrics of network performance derived from raw data indicative of network activity. Feinberg teaches the collected data are metrics of network performance derived from raw data indicative of network activity (column 5 lines 30-45)

The reference teaches collected data are of QoS events (metric) of the network performance indicating types of packet loss, packets received out of sequence etc. which are derived from shaping the raw data.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Feinberg's teaching in Grabelsky and Kekic teaching to come up with collected data are metric of network performance derived from the raw data. The motivation for doing so would have been to find out how the network is performing indicating packets loss, jitter, excessive network delay and how much information transfer rate is.

As per claim 10, Grabelsky and Kekic teaches the computer program product of claim 9 but fails to teach further comprising instructions for causing the computer to derive the metrics from the raw data. Feinberg teaches instructions for causing the computer to derive the metrics from the raw data (column 5 lines 40-45) It would have been obvious to one of ordinary skill in the at the time of applicant's invention to implement Feinberg's teaching in Grabelsky and Kekic's teaching to come up with deriving the metric from the raw data. The motivation for doing so would have been to find out how the network is performing indicating packets loss, jitter, excessive network delay and how much information transfer rate is.

As per claim 11, Grabelsky and Kekic teaches the computer program product of claim 10, but Grabelsky further teaches least portion of a broadband network (column 4 lines 14-18)(Fig. 4) but both Grabelsky and Kekic fails to teach wherein the instructions for causing the computer to derive the metrics include instructions for causing the computer to: obtain first metrics of performance of at least a portion of the network; and combine a plurality of first metrics into a second metric of network performance indicative of a higher-level of network performance than indicated by the first metrics. Feinberg teaches the instructions for causing the computer to derive the metrics include instructions for causing the computer to:

-obtain first metrics of performance of at least a portion of the network (column 5 lines 31-45); and

The reference teaches obtaining QoS parameter data or also known as QoS events (first metrics).

combine a plurality of first metrics into a second metric of network performance indicative of a higher-level of network performance than indicated by the first metrics (column 5 lines 31-60)

The reference teaches combining QoS events into QoS parameter value (second metric of network performance of higher-level network performance) to indicate which QoS events have been lost.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Feinberg's teaching in Grabelsky and Kekic's teaching to come up with obtain first metric of performance and combine first metrics into second metrics indicative of higher-level of network performance in the broadband network. The motivation for doing so would have been to find out metric of the network performance and this information can be used to find out and to compare the network metric with other part of the network and find out which part of the network is not performing well and which may be bringing the network performance down.

As per claim 12, Grabelsky, Kekic, Feinberg teaches the computer program product of claim 11 but Feinberg further teaches wherein the instructions for causing the computer to combine first metrics weight different metrics differently dependent upon perceived relevance of an issue associated with the metric to network performance (column 5 lines 40-49)

As per claim 13, Grabelsky, Kekic, Feinberg teaches the computer program product of claim 10 but Feinberg further teaches wherein the instructions for causing the computer to derive the metrics include instructions for causing the computer to perform

comparisons of first metrics derived from the raw data with thresholds and to provide second metrics based upon the comparisons (column 5 lines 40-60)

The reference teaches shaping the raw data which comprises QoS events (first metric derived from raw data w/ thresholds) to obtain QoS parameter value (second metric) based on comparisons.

As per claim 14, Grabelsky, Kekic, Feinberg teaches the computer program product of claim 13, but Feinberg further teaches wherein the second metrics provide indicia of grades of degraded performance of portions of the network as a function of time (column 5 lines 45-49)(column 5 lines 49-64)

The reference teaches the QoS parameter value (second metric) is produced by summing the total number of lost packets (degraded performance of the network) in a one second period (as a function of time).

As per claim 22, Grabelsky, Kekic teaches the computer program product of claim 1 but Kekic further teaches function over time (Fig. 35A)(Fig. 35B) but fails to teach wherein the first and second data provide indicia of grades of degradation of performance of at least portions of the network as a function of time Feinberg teaches the first and second data provide indicia of grades of degradation of performance of at least portions of the network (column 5 lines 24-27). The reference by kekic teaches graphing the data values over time. The reference by Feinberg teaches number of packets lost (first data), excessive network delay (second data). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Feinberg's teaching in Grabelsky and Kekic's teaching to come up with first and second

data indicia of grades of degradation of performance of the network as a function of time. The motivation for doing so would have been so that to see how the network behaves over time so that one could use this information on how in future the network might work or behave.

As per claims 41-46,54 teaches same limitations as claims 9-14,22 respectively therefore rejected under same basis.

5. Claims 23,55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabelsky et al. U.S. Patent # 6,678,250 (hereinafter Grabelsky) in view of Kekic et al. U.S. Patent # 5,999,179 (hereinafter Kekic) further in view of Feinberg et al. U.S. Patent # 6,798,745 (hereinafter Feinberg) further in view of Dziekan et al. U.S. Patent 6,704,288 (hereinafter Dziekan).

As per claim 23, Grabelsky, Kekic, Feinberg teaches the system of claim 22 but fails to teach the network is a DOCSIS network including cable modems and cable modem termination systems, and the first metrics indicate numbers of cable-modem hours at the levels of performance of the network. Dziekan teaches network is a DOCSIS network including cable modems and cable modem termination systems, and the first metrics indicate numbers of cable-modem hours at the levels of performance of the network (Column 1 lines 31-53). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Feinberg's invention in Dziekan's invention to come up with DOCSIS network with cable modems and cable modem termination system to indicate number of cable modem hours by the first metric.

The motivation for doing so would have been to monitor the levels of performance of the network.

As per claim 55, it teaches same limitations as claim 23, therefore rejected under same basis.

6. Claims 4-8,24-32, 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabelsky et al. U.S. Patent # 6,678,250 (hereinafter Grabelsky) in view of Kekic et al. U.S. Patent # 5,999,179 (hereinafter Kekic) further in view of Bearden et al. U.S. Patent Publication # 2003/0086425 (hereinafter Bearden)

As per claim 24, Grabelsky and Kekic teaches a computer program product of claim 1, but Kekic further teaches the hierarchy further comprising a plurality of sub-categories contributing to the summary category (Fig. 6C element 641), and the sub-categories each further comprising at least one sub-sub-category (Fig. 6C element 650) contributing to the sub-categories (Fig. 6A, 6B, 6C). Grabelsky and Kekic fails to teach wherein said instruction to provide a hierarchical display includes an instruction to obtain indicia of cumulative amounts of time that network elements of at least a desired portion of a broadband network were considered at corresponding qualities of network performance during a designated time frame; said computer executable instructions further comprising: display the cumulative amounts in a hierarchy of network issues, the hierarchy including a summary category including summary values indicating total cumulative amounts of time that the network elements in the at least a desired portion of the network were considered at corresponding qualities of performance. Bearden teaches said instruction to provide a hierarchical display includes an instruction to

obtain indicia of cumulative amounts of time that network elements of at least a desired portion of a broadband network were considered at corresponding qualities of network performance during a designated time frame (Fig. 19A-B, 20A-D, 21,22,23);

In the figure listed above they show jitter, packet loss, one-way delay, utilization percentage, maximum utilization percentage within an hour per device (indicia cumulative amounts of time of the network elements) during time period of 9/17/2001-9/24/2001. (corresponding qualities of network performance during a designated time frame)

said computer executable instructions further comprising: display the cumulative amounts in a hierarchy of network issues, the hierarchy including a summary category including summary values indicating total cumulative amounts of time that the network elements in the at least a desired portion of the network were considered at corresponding qualities of performance (Paragraph 244) (Fig. 22)(Fig. 25) The reference teaches displaying summary plot of week, non-week, weekend (total cumulative amounts of time) in the hierarchy of network issues (Fig. 25)

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Bearden's teaching in Grabelsky and Kekic's teaching to come up with displaying summary of the total cumulative amounts of time at the corresponding qualities of performance in the hierarchy of network issues and the hierarchy having sub-categories and each contributing to at one sub-sub categories. The motivation for doing so would have been to split up the summary, network issues,

and other performance data and issues in to categories to have a better view of the data in categories (user friendly) and it is easier to do the analysis.

As per claim 25, Grabelsky, Kekic and Bearden teaches the computer program product of claim 24 but Bearden further teaches wherein the summary values indicate total cumulative amounts of time that all the network elements in the at least a desired portion of the network were considered at corresponding qualities of performance (Paragraph 244)(Fig. 22).

In the figure listed above they show jitter, packet loss, one-way delay, utilization percentage, maximum utilization percentage within an hour per device (indicia cumulative amounts of time of the network elements) during time period of 9/17/2001-9/24/2001. (corresponding qualities of network performance during a designated time frame)

As per claim 26, Grabelsky, Kekic and Bearden teaches the computer program product of claim 24 but Bearden further teaches comprising instructions for causing the computer to indicate that categories contributing to a higher-level category are one of direct contributors and indirect contributors to the higher-level category (Paragraph 238).

The reference teaches monitoring 3 separate time periods affecting the data weekends, non-business hours and business hours and by location, floor and building (direct contributors and indirect contributors)

As per claim 27, Grabelsky, Kekic and Bearden teaches the computer program product of claim 24 but Bearden further teaches comprising instructions for causing the

computer to display additional information regarding a selected category of cumulative amounts. (Fig. 22) (Fig. 25 element 624,627)(Paragraph 245)

As per claim 28, Grabelsky, Kekic and Bearden teaches the computer program product of claim 27 but Bearden further teaches comprising instructions for causing the computer to display further additional information regarding selected additional information (Fig. 25 element 628,629,630)(Paragraph 245,246,247)

As per claim 29, Grabelsky, Kekic and Bearden teaches the computer program product of claim 24 but Bearden further teaches comprising instructions for causing the computer to determine network areas that are most-negatively contributing to network performance (Paragraph 230) (Paragraph 231)

The reference teaches the devices in the network are shaded with different colors to indicate their performance with respect to given metric such as delay, loss etc. to indicate where the problems in the network lie because with this information one could know where the most negatively network area is and this might be affecting the network performance (most negatively network area contributing to network performance).

As per claim 30, Grabelsky, Kekic and Bearden teaches the computer program product of claim 29 but Bearden further teaches comprising instructions for causing the computer to recommend action, regarding at least one of the network areas that are most-negatively contributing to network performance, for improving network performance. (Paragraph 231 lines 21-27)(Paragraph 233 lines 1-15)

The reference teaches providing user interaction when the computer shows the network topology with the areas most negatively contributing to the network performance. Using the user interaction, the user can change the placement of the links and the devices by manual intervention for better network performance.

As per claim 31, Grabelsky, Kekic and Bearden teaches the computer program product of claim 29 but is silent in teaching further comprising instructions for causing the computer to implement action, regarding at least one of the network areas that are most-negatively contributing to network performance, for improving network performance. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement in Grabelsky, Kekic and Bearden teaching's where causing the computer to implement action regarding at least one of the network areas. The motivation for doing so would have been so that user does not have to manually fix the most negatively network area and also computer would be more proficient to fix the problem because it tracks all the data as to where and which network section is performing poorly therefore fixing that part of the network.

As per claim 32, Grabelsky, Kekic and Bearden teaches the computer program product of claim 24 but Bearden further teaches wherein the instructions for causing the computer to obtain indicia of cumulative amounts of time that network elements cause the computer to access a storage area (Fig. 4 element 340) containing the indicia (claim 21)(claims 18,19,20)

The reference teaches accessing the data store where all the measurements, analysis regarding network elements is stored.

As per claim 4, Grabelsky, Kekic teaches the computer program product of claim 1 but fails to teach further comprising instructions for causing the computer to provide more detail of issues comprising a selected level. Bearden teaches further comprising instructions for causing the computer to provide more detail of issues comprising a selected level (Paragraph 233 lines 6-10). The reference teaches user clicking on the device of interest to access detail information about it. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement Bearden teaching in Grabelsky and Kekic's teaching to come up with providing more detail of issues comprising a selected level. The motivation for doing so would have been so that know more detail issues so that to know where and which part of the selected level is lowering the network performance.

As per claim 5, Grabelsky, Kekic and Bearden teaches the computer program product of claim 4 but Bearden further teaches wherein the more detail includes at least one of locations of network elements associated with the selected level, and metrics corresponding to the network elements and associated with at least one issue comprising the selected level (Paragraph 230)(Paragraph 231 lines 1-18)(Paragraph 233 lines 1-15).

The reference teaches coloring coding the network elements indicating the performance and when clicking on it defining the location on the display and providing the metrics information when clicked on the device.

As per claim 6, Grabelsky, Kekic and Bearden the computer program product of claim 5 further comprising instructions for causing the computer to provide more detail

regarding a selected portion of the more detail provided of issues comprising a selected level (Paragraph 230)(Paragraph 231 lines 1-18)(Paragraph 233 lines 1-15)

The reference teaches providing issues of the selected level, where the issues are of delay, loss and jitter or device load, initialization.

As per claim 7, Grabelsky, Kekic and Bearden teaches the computer program product of claim 5 but Bearden further teaches comprising instructions for causing the computer to sort the more detail according to at least one selected criterion (Fig. 16,17,18)(Paragraph 229)(Paragraph 231)

The reference teaches the details arranging the network elements using the color codes with respect to the more details as stating in Paragraph 231.

As per claim 8, Grabelsky, Kekic and Bearden teaches the computer program product of claim 7, comprising instructions for causing the computer to analyze the more detail and to do at least one of: provide at least one of an indication of a likely network problem (Fig. 16,17,18)(Paragraph 231)

The reference teaches different colors utilizing to see where the network problems lie when the different colors means different things in regards to network performance for examples purple colors means synthesized call failed.

-a suggested action for addressing the likely network problem; -implement corrective action to attempt to address the likely network problem.(Paragraph 231 lines 21-27)(Paragraph 233 lines 1-15)

The reference teaches providing user interaction when the computer shows the network topology with the areas most negatively contributing to the network

performance. Using the user interaction, the user can change the placement of the links and the devices by manual intervention for better network performance.

As per claims 36-40,56-64 teaches same limitations as claims 4-8,24-32 respectively therefore rejected under same basis.

As per claim 66, it teaches same limitation as claim 24, therefore rejected under same basis.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A). " Method and system for monitoring and management of performance of real-time networks" by Grabelsky et al. U.S. Patent 6,678,250

B). "Network traffic generation and monitoring systems and method for their use in testing frameworks for determining suitability of network for target applications" by Bearden et al. U.S. Patent Publication # 2003/0086425

C). "Quality of service management for voice over packet networks" by Feinberg et al. U.S. Patent # 6,798,745

D). "Platform independent computer management client" by Kekic et al. U.S. Patent # 5,999,179

E). "Arrangement for discovering the topology of an HFC access network" by Dziekan et al. U.S. Patent # 6,704,288

8. A shortened statutory period for response to this action is set to expire **3 (three)**

months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the applicant (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A Patel whose telephone number is (571) 272-4066. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAP

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER